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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and im rove the character of the service rendered to the public.

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FAVORS THE CANAL.

It is expected that the address from the throne to be delivered this month before the. Canadian Parliament will contain a proposition for the construction of the Huron and Ottawa Canal by the government or by a private corporation given a liberal government subsidy. This means the construction of a deep water canal from or near Parry Sound, on Georgian Bay, to the Ottawa River, near Renfrew, a distance of 120 miles. A vessel can then pass from the Sault Ste. Marie direct to Montreal in less time than it now requires to reach Buffalo or the entrance of the Welland Canal, on Lake Erie. From Sault Ste Marie to Montreal via Parry Sound is 500 miles, while from Sault Ste. Marie to Buffalo is 580 miles. From Sault Ste. Marie to Montreal via Detroit, the Welland Canal and the St. Lawrence River is 1,000 miles so that the saving in distance by the construction of the Huron and Ottawa Canal is 500 miles. The St. Lawrence route is already a formidable competitor for traffic to and from the lakes to the Atlantic, but the Huron and Ottawa Canal would be infinitely superior to the present route by the St. Lawrence.

ONLY ONE AMERICAN VESSEL.

Consul Campbell, at Newcastle-on-Tyne, writes to the State Department that in connection with the discussion of the present small participation of the American flag in the carrying abroad of American products it may be of interest to note the experience of that consular district alone during the past year. At Newcastle and its agencies at Hartlepool, Sunderland and Carlisle, 437 consular bills of health were issued to foreign vessels bound to the United States, mostly in ballast and bound to ports all the way from Boston to Galveston in pursuit of American cargoes. Of these, 402 were British, 35 were under various continental flags and, with the exception of eleven sailing vessels, all were steamers averaging above 2,500 tons each. During the same period but a single American vessel, a sailing ship of 1,572 tons, arrived and departed in the Tyne consular district.

TO COMPENSATE LIFE SAVERS.

One of the consequences of the wreck of the Elbe will be the appearance in the near future of Rev. S. E. Young, pastor of the Central Presbyterian Church, of Newark, N. J., before a congressional committee with a plan for the establishment of an international committee of awards. Mr. Young says he has given considerable thought to the matter, and he is convinced that too often the captains of ocean steamships will not stop at sea to search for a vessel or aid one in distress. The reason for this, he says, is found in the fact that their cargoes are perishable and they are held responsible by the companies. The plan of Mr. Young will call for the protection of all captains who are aiding a ship in distress from suffering financial loss. All awards are to be made by the international committee, whose duty it shall be to assess the damages which shall be paid by the nation under whose flag the wrecked vessel sailed.

TO TAP THE PACIFIC COAST.

According to reports from Portland, Ore., the Great Northern Railroad has completed arrangements with the Receiver McNiell, of the Oregon Navigation Co., to run a line of steamers from the terminus of the Great Northern at Puget Sound, to China and Japan. It is stated that the contract was signed Wednesday, of this week. The service will be winter and summer, arrangements being made east from St. Paul over an all-rail route, as well as by the lakes, which will be used for eight months in the year. This Pacific coast steamship line has been kept in view by President J. J. Hill, ever since his railroad touched the coast, and it was currently stated that this was the object of his present trip to Europe, which he has claimed, and it now seems with truth, was solely for rest and recreation. The service will, for the present, be monthly, and will be inaugurated at once.

STORM WINDOWS FOR PILOT HOUSES.

The Tinker Storm Window Co., of Springfield, Mass., are manufacturing a window for the pilot houses of steamers on which frost will not form and obstruct the pilot's view. To the inside of a regular window is secured a specially designed window so constructed as to form a watertight space about five-eighths inch in width between the two panes of glass, which space is filled with water, or, if preferred, any other suitable transparent liquid. The water is heated sufficiently so that the snow, ice, frost, etc., will not adhere to the surface of the glass, thus providing a clear glass in front of the pilot during the worst storm or coldest weather. The necessary warmth is imparted to the water by a tube between the glasses, through which a small jet of steam passes. When filled with water the appearance of the window does not differ from a single pane of plate glass. It is claimed to be easily regulated by the pilot, to require but little steam, and to accomplish its work in a most satisfactory manner.

NOTICE TO MARINERS.

UNITED STATES OF AMERICA—NORTHERN LAKES AND RIVERS—MICHIGAN.

MUSKEGON PIERHEAD LIGHT.—Notice is hereby given that, on January 16, 1895, a sixth-order lens illuminating the entire horizon, was substituted, without any other change in characteristics, for the one formerly in use at Muskegon pier-head light station, on the S. pier, entrance to Muskegon harbor, E. side of Lake Michigan.

The light can now be seen from Lake Muskegon, and when just open beyond the hills on the S. side of the channel between the piers furnishes a guide for entering that channel from the lake.

By order of the Light-House Board.

JOHN G. WALKER,
Rear-Admiral U. S. Navy, Chairman.

Office of the Light-House Board, Washington, D. C., February 1, 1895.

The following notice has been issued by the department of marine and fisheries relating to the improvements to Collingwood harbor light: The light at the turn of the dredged channel in Collingwood harbor, Georgian Bay, has been improved by removing the mast with white shed on its base from the crib on which it stood and replacing it with an enclosed light-house tower. Lat. N. 44° 30′ 40″. Long. W. 80° 13′ 45″. The tower is a square, pyramidal, wooden building, painted white, surmounted by a square wooden lantern, painted red. The height of the building from the pier to the vane on the lantern is 27 feet. The light, which was first shown from this tower on the 10th of August last, is a fixed red light, which should be visible from all points of approach in the channel, six miles. It is elevated 27 feet above the level of the bay. Vessels making the harbor from the westward keep about half a mile off shore until this light opens a little to the eastward of the light on the extremity of the west breakwater, when they haul for the former, leaving the breakwater light 250 feet distant on the starboard hand in passing. They also leave the harbor light on the starboard hand in entering.

NEWS AROUND THE LAKES.

CHICAGO, ILL.

Special Correspondence to The Marine Record.

Capt. Wesley Brown, of the steamer Centurion, spent last week in this city.

Capt. Dennis Sullivan went to Milwaukee Monday, and attended the funeral of the late Capt. Thomas Davidson.

Capt. James O. Wood, formerly of the steamer Robert Holland, will command the steamer Walter Vail the coming season.

Chauncey Wright died at Lexington, Miss., on Sunday, January 20. He came to Chicago from Oswego, N. Y., in 1866, and was for many years a vessel agent in Chicago.

The steel schooner Marcia, of the Minnesota Line, was successfully launched on Thursday. The cost of the Malta and Marcia, both of which are steel tow barges, is given out as $105,000 each.

A. F. Leopold, agent of the Standard Oil Works' lubricating department, who has been sick for five weeks, is now fully recovered and able to be around again amongst his many marine friends.

The charter of the steamer Queen of the West for 45,000 bushels of corn for winter storage and delivery at Buffalo in the spring, at 2¼ cents per bushel, by Palmer, Cook & Calbick, was the only grain charter made during the week.

Capt. Dan Stalker's son Walter, left here Tuesday morning for Fort Howard, Wis., to enter into the bonds of matrimony with Annie Bain, daughter of an old lake seaman, who sailed for many years mate with the bridegroom's father. The happy couple will return to Chicago immediately after their marriage.

A rumor was started here on Sunday that the steamer Chicora was off South Chicago. The tugs Protection and Calumet of the V. O. T. Co., were sent out and searched until dark, but could find do trace of her. The Dunham Towing Co.'s tug T. T. Morford, also went out on Monday, searching for the Chicora, but returned without having sighted anything.

The Marine Engineers' Beneficial Association's 20th anniversary ball, held Thursday evening, December 31, at Brand's Hall, was a complete success. Nearly 200 couples took part in the grand march and the dancing to excellent music was much enjoyed. The supper was excellently served and the happy event was one of the best ever participated in by the Chicago M. E. B. A. and their friends.

Lieut. George P. Blow, U. S. N., in charge of the branch hydrographic office, at this port, delivered a very interesting address at the Shipmaster's Association Hall, Wednesday afternoon, January 30, to the members and their friends. There was a large attendance, and all were impressed with the idea that the hydrographic office was of great use in matters connected with marine interests and a great help to lake pilots and navigators.

There has been a reorganization of the naval reserve corps at this port and the second division has elected the following officers: Lieutenant, Wm. Robinson, re-elected; Lieutenant (junior grade), John R. Ubsdell, re-elected; Ensign, Samuel D. Flood, re-elected, and Ensign, Mr. Warren newly elected; Mr. Ubsdell and Mr. Warren as draughtsmen and designers at the yards of the Chicago Ship Building Co. The annual report of Lieutenant Schuetze to Secretary McAdoo on the naval militia has been made public by Secretary Herbert and it is recommended that a series of drills in the monitors be arranged for with the governors of the states in which a naval reserve is enrolled. It is believed two or more monitors on the Atlantic Coast and the Monterey on the Pacific may be available for this important duty. According to reports made to Washington by the governors of the states, the strength of the naval reserve is now placed at 2539.

BUFFALO, N. Y.

Special Correspondence to The Marine Record.

Capt. Baylis Davis, of the steamer Puritan, of the Fall River Line, is visiting his son-in-law, Mr. A. J. Russell.

The state engineers have arrived to begin the work of deepening the Ohio basin, for which an appropriation of $60,000 has been made. The basin is surrounded by lumber yards, but is not deep enough for the traffic.

At the Mills dry dock the entire upper works of the propellor Vanderbilt are being renewed. The Commodore is getting a part new keel and bottom plank, beside steel chords through bolted on her keelsons. The G. G. Hadley is receiving steel arches, and being otherwise strengthened.

A new association has been formed by Tonawanda tug men, and this action probably averts a war at that port next season. The new organization is known as the Vessel Owners' Tug Line, and includes the two largest tugs in the harbor, as well as new and handy boats for transporting and canal towing. Capt. Michael Dunn is manager.

The project for building extensive docks on Squaw Island may not reach reality this season, owing to the continued illness of Mr. D. M. Thomas, of New York, one of the chief backers of the scheme. The original options on the property have expired, but extensions have been secured. Last week Mr. Fatch, of New York, visited the Island, and after looking over the property and plans, expressed himself as greatly pleased with the oportunity for establishing terminals and connections.

A meeting of the Lake Line managers with the executive committee of the Trunk Line association was held in New York last week to arrange east bound freight rates on the lake and rail lines for next season. No definite action was reached, and the meeting adjourned for two weeks. Those who attended were John Gordon, of the Northern S. S. Co., Washington Bullard, of the Union Steamboat Co.; Capt. W. P. Henry, of the Lehigh Valley Transit Co.; H. L. Shute and R. H. Hebard, of the "Soo" Line; H. C. French, of the Union Transit Co.; F. J. Firth and J. E. Payne, of the Erie & Western Transit Co., H. J. Hayden, of the New York Central; J. D. Layng, of the West Shore; E. B. Thomas, of the Erie; B. A. Hagen, of the Lackawanna; J. B. Garrett, of the Lehigh Valley; Frank Thomson and W. H. Joyce, of the Pennsylvania R. R ; B. H. Bail, of the Reading, and Frank Harriott of the Baltimore & Ohio.

At last Saturday's meeting of the Buffalo Lodge of the Shipmasters' Association, resolutions were adopted endorsing local forecast official, David Cuthbertson, as "an officer in whom we place the most explicit confidence in all matters connected with the weather," and state that "his vast experience and thorough knowledge of lake marine matters cannot fail to be of great value to the shipping interests of the Great Lakes and an honor and credit to the Weather Bureau." Afer a spirited discussion it was decided that a communication should be addressed to Mayor Jewett asking him to rescind the appointment of Capt. Soper as harbor-master, and asking that he appoint a harbor-master from the ranks of the Shipmasters' Association, without regard to political affiliations. The objections to Capt. Soper are that he is not a lake captain, has not lived long in Buffalo, and is not familiar with the river and harbor. The mayor, however, rufuses to consider the request of the shipmasters.

CLEVELAND, O.

Special Correspondence to The Marine Record.

Capt. J. W. Westcott, of Detroit, visited this port on Wednesday.

The steel steamer German has been undergoing extensive bottom repairs all week in the Cleveland dry dock. She will be followed in a day or two by the Northern King.

Owing to the extremely cold weather no work has been carried on at the Ship Owners' Dry Dock this week, as the vessels that were booked ahead for the dock are frozen in.

Capt. Thos. Wilson and Mr. George Quayle, Mr. M. A. Bradley and Capt. W. C. Richardson are leaving town for a Southern tour this week. Capt. George P. McKay will later in the month also take a vacation.

The Shipmasters' Association of this port has concluded not to send another delegation to Washington as requested by the board of supervising inspectors now in session. Capt. Galvin, of Buffalo, on the board of inspectors, will represent lake interests.

Invitations are out for the 14th annual ball of the Marine Engineers' Beneficial Association, No. 2, to be held Monday evening, Feb. 11, at Merrill's Hall, Carroll and Pearl streets. The several committes are composed of the following members: Arrangements, Wm. Most, H. F. Riley and Henry T. McAuley; reception, C. M. Stoddard, A. J. Aiken, John Smith, J. L. Chase, Wm. Kennedy, Geo. Masters and Silas H. Hunter; floor director, Omer N. Steele; floor managers, M. B. Sturtevant, J. B. Heyward, Chas. Welch, A. N. McDonald, H. W. Burton, Wm. H. Kennedy and J. Kirby. The marine engineers' annual ball is always a most enjoyable affair.

Vesselmen will be pleased to learn that Capt. C. E. Benham has yielded to the urgency of his friends and will enter the contest for the nomination of councilman for the Ninth city district, which comprises four of the West End wards. The "contest" will doubtless be merely nominal, for few would care to open a useless competition with him for the honor. In entering the campaign, Capt. Benham realizes that his private interests will suffer somewhat by reason of the attention he will give to municipal matters. He has been induced to do this by his colleagues in the Lake Carriers' Association and the Chamber of Commerce, who feel that a practical marine man will be badly needed in the City Council during the coming year, when so many matters particularly concerning lake commerce will be passed upon. Few men can fill this place so well as Capt. Benham. His ability in marine affairs, from both a technical and commercial standpoint, is rarely equalled, and to this is added the judgment and vigor of the prime of life, the tact and "push" of the man of affairs, and a thorough familiarity with local conditions and the best results that can be attained by the municipal government. He is a man above party lines in matters pertaining solely to the city's welfare, and will be an excellent conservator of all business interest. His nomination and election are assured.

DETROIT, MICH.

Special Correspondence to The Marine Record.

Mr. A. A. Parker has left for Florida on his usual annual vacation.

A company of the state naval reserve was organized at Saginaw and Bay City this week.

The death of Capt. John Cadotte, at the age of fifty years, is announced from Algonac.

Capt. Thomas Camry died at Bay City, last Friday, aged 80 years. He was born in England, but came to the States in 1833.

Capt. John Mitchell, of Cleveland, was here on Wednesday attending the annual meeting of the Hopkins Transportation Co.

Judge Swan has issued decrees to the amount of $6,000 against the little steamer Maud Preston, which is worth about $4,000. Charles Leahy was awarded a judgment of $410 as pay for the use of a steam pump.

The D. & C.'s Lake Huron division steamers will make a run between Detroit and Mackinaw, next season including eight stops, in 25 hours. The actual running time will be 22½ hours. The D. & C. and Northern Steamship lines have made an arrangement on Mackinaw business. The D. & C. rates from Detroit to Mackinaw will be $2 for the round trip, or $1 less than on the North West and North Land, which will make two trips per week, as compared with four of the D. & C. boats. The Northern line will route all its Michigan business as far as possible, via. the D. &. C. line from Detroit to intermediate west shore points.

Capt. Frank Brabaw, Engineer John Durham and Dr. McDonough, all of Marine City, have purchased a three-quarter interest in the steamer Sailor Boy, from Capt. Richard Armstrong, of Bay City, and will operate her between Marine City and Detroit, next season, with stops at the North Channel Club House, New Baltimore, Anchorville, etc. The Sailor Boy is about five years old, and was by far the best of the "Boy Line," once famous on Saginaw River. She has been in the excursion business on the lake front at Chicago for three years, and is said to have netted enough money to pay for herself. She travels twelve miles an hour on 5½ feet draft, is licensed to carry 325 passengers, and has plenty of room for freight.

MILWAUKEE, WIS.

Special Correspondence to The Marine Record.

Capt. David Vance and R. P. Fitzgerald intend taking a trip to the South next week.

The schooner Quickstep, which recently changed hands here, netted $2,600 in 1893 and $2,400 in 1894.

Nearly all the Lake Michigan winter fleet is reported

fast in the ice. The crews of the F. & P. M. Nos. 2, 4 and 5 have been paid off.

It is said that Capt. John Mooney, who lately sailed the steamer John Allmendinger, will command the Arcadia next season, vice Capt. Ephraim Small, resigned.

Holland, Graves & Co., who purchased last season's cut of lumber, lath and shingles from H. Whitbeck Lumber Co., of Marinette, has just completed arrangements to secure the cut of 1895.

The steamer, Mabel Bradshaw will run between Pentwater and Chicago next season in the fruit, general merchandise and passenger business. The E. L. Hackley will run between Muskegon and Point Sable.

Otto L. Kerehn, a homing pigeon fancier, is advertising his birds among the winter vessel men, to whom he is willing to furnish birds free of cost for experimental purposes The Chicora's loss sufficiently demonstrated the need of such a means of getting tidings to shore.

Capt. Conrad Starke's combination water-tube and Scotch-type boilers have been tested in the steamer E. A. Shores sufficiently to demonstrate their superiority over any other style of boilers in use on large lake steamers. The patent is being handled by the Manitowoc Boiler Co.

The annual meeting of the Goodrich Transportation Co. was held here Tuesday morning. The election of officers resulted as follows: President, A. W. Goodrich, Chicago; vice-president, E. L. Upton, Chicago; secretary, F. C. Reynolds, Milwaukee, who is local agent as well; superintendent, J. W. Gillman, Chicago. Albert Conro, of this city, who has been a director for some years, resigned, and Fr. Lowden was chosen to succeed him. According to previous announcement, Gregory Hurson, who has been with the Goodrich Co. many years, resigned the offices of director, secretary, and traffic manager. The latter office was abolished. Mr. Hurson will start a daily boat on the Chicago-Milwaukee route about April 1, and will doubtless realize a good profit, as he has hosts of friends in both cities.

PORT HURON, MICH.

Special Correspondence to The Marine Record.

The Jenks Shipbuilding Co , of Port Huron, have sold the steamer Desmond to W. H. White & Co., of Pine Lake, the consideration being $30,000.

The steamer Sailor Boy will run next season between Marine City and Detroit, Marine City parties having purchased a controling interest in her from Capt. Richard Armstrong, of Bay City, her former owner.

Harbor Springs will have a boom as a summer resort this coming season, as the steamer Manitou will make three round trips per week between Chicago and Mackinac Island, and will stop at Harbor Springs both ways.

St. Clair River is filled with ice up the mouth of Black River, and persons are crossing St. Clair River on the ice, from the lower part of the city. At St. Clair and Marine City teaming is done across the ice with perfect safety.

C. F. Smith was working at Wheeler & Co.'s shipyard, West Bay City, when a steel plate accidentally dropped. It struck Mr. Smith on the head and cut a hole in his skull five inches long. The attending physician has little hope of his recovery.

Christian A. Monn, of this city, died on Wednesday last, at the Eastern Michigan Insane Asylum, at Pontiac. Mr. Monn was a brother of Robert and Jas. A. Monn, of this city, and until two years since was one of our best marine engineers. He leaves a widow and one child.

A house belonging to C. G. Ludlow, of Chicago, burned at Saugatuck, Tuesday. The house was an old land mark, and its doors were some that formerly belonged to the ill-fated steamer Lady Elgin, which drifted ashore, with other wreckage of that vessel, in 1855.

A Canadian firm of lumbermen are making arrangements to take 25,000,000 feet of logs to the Saginaw mills for sawing. The owners claim they can get a better market for the logs by taking them there than by having them sawed in Canadian mills. The cost of sawing is no higher.

The annual report of the Langell & Son's Co., of St. Clair, has been filed with the county clerk. It shows capital stock, $150,000; paid in $75,000; real estate, $7,000; personal estate, $52,000; debts, $205.67; credits, $18,502. Arthur Forest, John D. William, Walter and Simon Langell are the stockholders.

Capt. R.C. Brittain, a shipbuilder of Saugatuck, Mich., has under construction a fleet of three small steamers, which are destined for service on the Lower Mississippi River. He built one boat last summer and sent her down the river last fall. She found such ready sale that he will build more after the same design. They are of light draft and have propeller wheels.

C. F. Harrington, commenting on the work of the Chamber of Commerce, says he believes one of the subjects for early disposal should be the cleansing of Black River in the summer. He believes that the north end waterworks should be used to pump water into Black River in the same manner as is done in Milwaukee to clean the river.

The annual report of the St. Clair Tunnel Co. presents some interesting figures: The total income of the St. Clair Tunnel Co. last year reached $249,479.50. The total expenses, including taxes, amoudted to $101,186.38. This left a net income of $148,293.12. After paying $126,014.82 interest, $22,278.31 was left for dividend. There are eight stockholders in the tunnel company, who have paid in a total of $308,000. The tunnel cost $2,898,026.87. The company employes 75 men. The locomotives used at the tunnel are worth $14,000 each. It costs $29,806.90 a year for fuel, water, oil and waste for the locomotives.

DULUTH, MINN.

Special Correspondence to The Marine Record.

The Cranberry Lumber Co., of Duluth, will build two docks on the east side of Rice's point, at the Gray Mill. The docks will have a capacity of twelve million feet, and will save about 30 cents per thousand in the handling over the methods heretofore employed.

Merchants at the head of the lake are still working for their south shore steamer line.

Capt. Angus McDougall has returned from the East. He is still with the American Steel Barge Co., and will be engaged for some time yet closing up their joint affairs. A meeting of the directors will be held in New York on the 12th.

John P. Gordon, general agent here for the Northern Steamship Co., has become agent for the Union Steamship Co. This change is probably what gave rise to the rumors of the resignation of General Manager John Gordon, of the Northern Line.

R. C. Wetmore, secretary of the American Steel Barge Co., was in Superior the other day looking after business matters. W. A. Thompson, book-keeper of the operating department, will act as book-keeper for the general officers. He was let out of his former position by the change of management. At the shipyard, work has begun on the Standard Oil barges, and the midship bulkheads for one are almost up. Men are busily at work on angle irons and plates.

It is said that fifty staterooms will be among the cabin improvements of the whaleback excursion steamer Christopher Columbus.

APPARATUS FOR TAKING SOUNDINGS WHILE UNDER WAY.

The veteran Capt. Charles E. Kirtland, of the Goodrich line, has patented an apparatus for taking soundings on vessels which commends itself to all who have given it an examination and test, because of the accuracy with which it performs its work and for the more important reason that it does away with the former and present method of heaving the lead. The apparatus consists of a lead, a float, and a line reel to which is geared a dial that records the soundings obtained. The lead and float are carried over the side of a vessel by an iron outrigger hooked to the rail. When a sounding is desired the operator draws a pall from a crank ratchet, which allows the reel to revolve freely until the lead strikes bottom and the line slackens; then a brake is applied, the catch in the crank ratchet reset, and the line is wound in until a sliding mark on the line reaches the outrigger sheave from the float, when the dial indicates the depth of water found in fathoms. If an examination of the arming on the lead is desired, the outrigger can be unhooked from the rail and set perpendicularly. One of Capt. Kirtland's machines has been in use on the Goodrich line steamer Menominee for some time and it gives the greatest satisfaction. In one test on this steamer when she was running a little over ten miles per hour, with a twelve-pound composite lead attached to thirty-one fathoms of wire lines. bottom was reached and brought up in sixteen fathoms of water. The apparatus is simple and takes up so little room that it can never be objected to because of getting in the way.

THE STEAMBOAT INSPECTION SERVICE ENDORSED.

In addition to his efforts on behalf of the White bill, which is practically a law, the Supervising Inspector General of Steamboats James A. Dumont, telegraphed from Washington, on Tuesday, an invitation to the Cleveland Lodge of the Shipmaster's Association, asking that a committee of the late Washington delegation to be sent to the capital to meet with the board of supervising inspectors for the purpose of compiling such new regulations as the newly enacted laws provide shall be fixed by the board. The members in Cleveland Lodge were very much pleased at the reception of these delegates by General Dumont, and, at their meeting last Friday, appointed Capts. C. E. Benham, James Stone, and John Hall, a committee to draft resolutions expressive of their appreciation. The resolution has already been sent to Washington, and is as follows:

Whereas, The members of Cleveland Lodge, No. 4, Shipmasters' Association, are unanimous in their opinion that General James A. Dumont, supervisor inspector general, and as such the head of the board of supervising inspectors, has conducted the affairs of that department in a most efficient manner; and

Whereas, He has at all times intelligently and conscientiously cared for the various interests represented within the extended territory over which his authority extends; and,

Whereas it has been our experience in many years of close association with him in following the rules laid down by the board, that in all things he has been most solicitous for the preservation of life and the safety of property, and ever ready to give a hearing to practical mariners in the furtherance thereof; now, therefore, be it

Resolved, That we, as practical mariners, heartily endorse James A. Dumont and his conduct of the affairs of the department and express our hope that he may be continued at the head of the department over which he has so long exercised control with credit to himself and to the satisfaction of those who have been subject to its rules.

A TUG'S YEARLY SERVICE.

Mr. Horace See, the eminent naval architect and engineer, of New York, sends us the following: Performance of the tug El Toro, of the Morgan line, for the year ending Dec. 31, 1894. This boat was built by the Newport News S. & D. D. Co., from designs of Horace See, and fitted with the See quadruple expansion engine.

Steamships towed from company's piers to Erie basin, or distance equal thereto	70
Steamships towed and docked at other piers	284
Lighters towed and moored	520
Miles run without tow	5,342
On fire duty	Remaining time
Days in commission	351
Coal consumed per day	1⅛ tons.

The full pressure of steam was kept on the boiler for the entire 24 hours. Boiler run four months without opening.

TREGURTHA SAFETY WATER TUBE BOILERS.

Murray & Tregurtha, South Boston, Mass., are building a 100 h. p. Tregurtha boiler for Mr. Robert Palmer, Noank, Conn. This is the second order from that gentleman, who has had one of these boilers in use for three years past. They have just completed a 35 in. Tregurtha boiler for Mr. Joseph S. Williams, Taunton, Mass., and are at work on a 32 in. for Mr. H. H. Townsend of that place. They have also shipped a 29 in. Tregurtha boiler and 4½x5 engine to Mr. D. Knowlton, Washington, D. C., and have an order for a 44 in. Tregurtha boiler and two 4½x5 engines for a twin screw boat for Mr. Fort Smith, Galveston, Tex. In their boat building department they have finished 25 ft. and 28 ft. launches, and are building a 28 ft. cruising cabin launch for Boston parties.

Mr. John S. George and Howard P. Eels have been appointed receivers of the Bucyrus Steam Shovel and Dredge Co. The business of the company will be carried on as formerly, existing contracts executed and orders for new machinery will be received on behalf of the receivers and meet with their prompt attention.

The keel of a new steamer to be laid at the yard of A. Dulac, Mt. Clemens, Mich., is intended to ply on the Clinton River and Lake St. Clair. The vessel will be 80 feet over all, 16 feet beam, will be driven by a 4½ foot wheel, and have a carrying capacity of from 150 to 200 passengers.

ELECTRICAL EQUIPMENT OF THE "PRISCILLA."

AN UNUSUALLY FINE MARINE INSTALLATION.

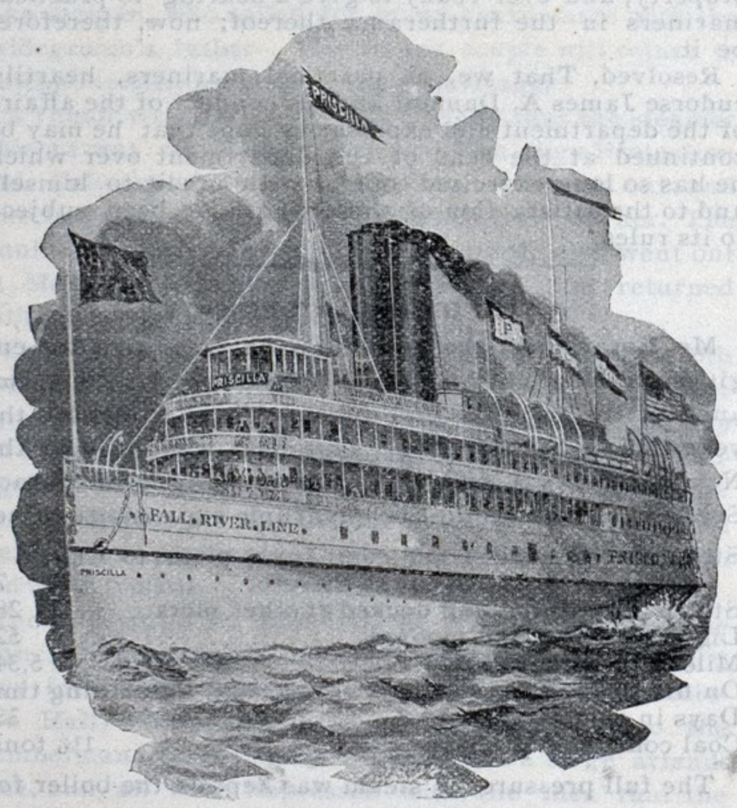
(ILLUSTRATED.)

The Priscilla is without doubt the finest side-wheel passenger boat ever constructed in the United States, and exemplifies the very high degree of excellence which has been attained in the art of shipbuilding. Designed by Mr. George Pierce, of the Old Colony Steamboat Co., built by the W. & A. Fletcher Co., of Hoboken, and electrically equipped by the General Electric Co., she is a model of perfection in construction as well as in her mechanical and electrical equipment. Nothing has been omitted which could add to the traveler's comfort, and more care has been bestowed upon her interior illumination than any other passenger steamer afloat.

Her dimensions are as follows: Length over all, 440 feet 6 inches; length on water-line, 423 feet 6 inches; breadth over guards, 93 feet; breadth of hull proper, 52 feet 6 inches; depth of hull, 20 feet 6 inches; tonnage, 5,398.

The steam plant consists of 10 boilers of the Scotch return tubular type, each having three corrugated furnaces giving a total grate surface of 850 square feet. They are constructed for a working pressure of 150 pounds per square inch, are arranged for natural or forced draught, and have an indicated capacity of 8,500 horse power. They furnish steam to a huge double inclined compound engine having two 51-inch high-pressure cylinders forward and two 95-inch low-pressure cylinders aft of the crank shaft. The piston stroke is 11 feet. The engine room is lighted from electroliers and bulk head fixtures, 129 lights in all.

The electric equipment of the Priscilla forms the most



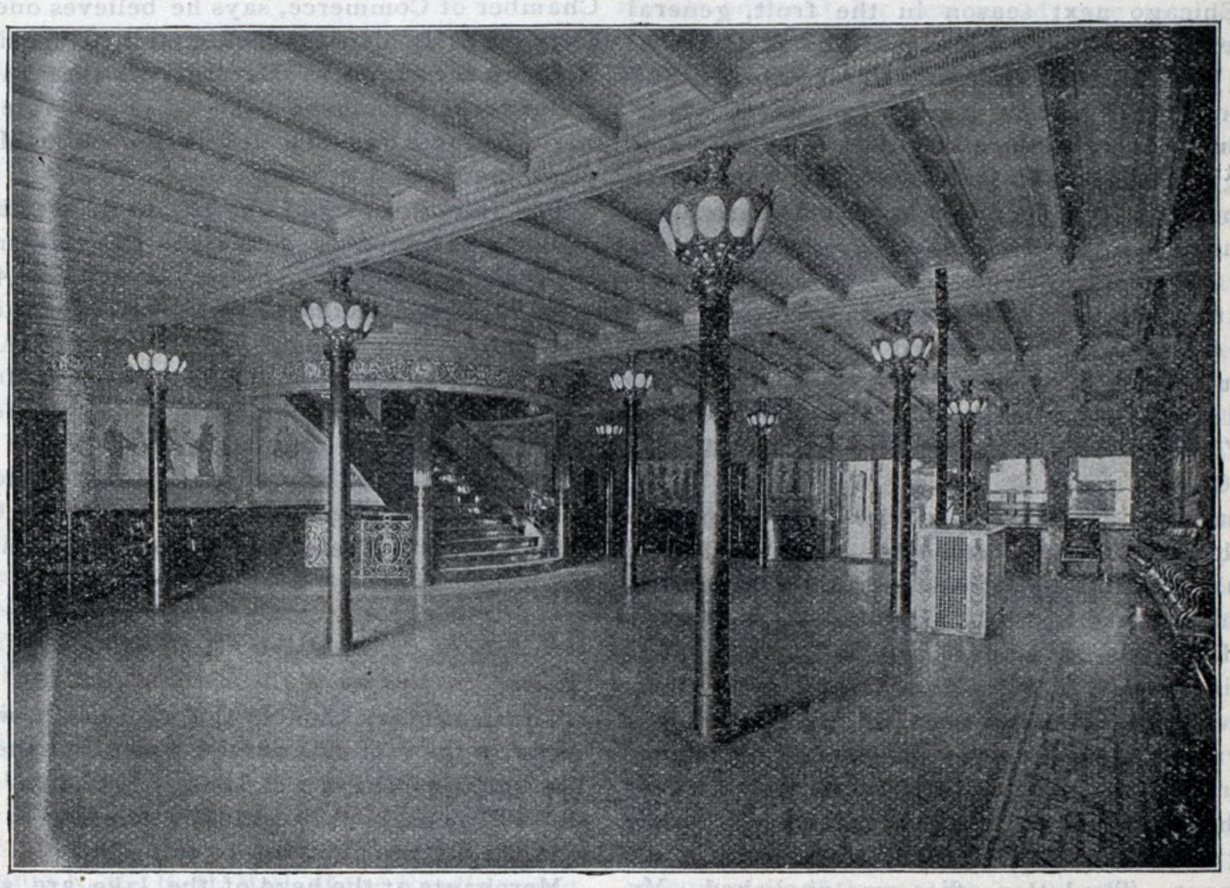
THE PRISCILLA.

extensive isolated marine electric lighting plant ever installed. It consists of three 50 kilowatt 275 revolution General Electric multipolar dynamos, each directly connected to a 11x12 Harrisburg Ideal engine with outboard bearings supplied by W. R. Flemming & Co. These engines operate both condensing and non-condensing. Each generator has a capacity of 400 amperes at 125 volts. The armatures are of the ironclad type, the windings being embedded in slots in the body of the armature. The brushes are operated simultaneously by means of a hand wheel. The dynamo and engine room measures in all 12½ feet by 25½ feet.

The output of the generators is carried to a switchboard of white marble framed in mahogany. This is an extremely handsome specimen of the switchboard work to which the General Electric Co. has given so much attention recently. At the base of the board three hand wheels operate three fire-proof field rheostats located behind it. Above these are three dynamo switches flanked by two voltmeter switches and over these are five main switches. A Weston illuminated dial voltmeter stands on each side of the board, and three 450 ampere circular dial ammeters arranged in a line along the upper portion.

The vessel is wired on the two-wire system. From the switchboard five feeders run to the main deck, and at four points of the vessel risers mount to the upper decks. These are connected to the circulating mains, one of which is on each deck, by means of four center of distribution safety fuse holders to each circulating main. At six points on each circulating main whence the smaller wires branch off to the state rooms, saloons and dining rooms are set marble cut-out panels of special design, each having its own peculiar form to fit it into the position it can most conveniently occupy. These are provided with knife-blade switches, which bring the current to two strips of flat copper, between which are set fuse carriers of porcelain. Connection is made behind the board with a snap switch on the front for every circuit. The fuse carried is a small porcelain box in which the fuse is fastened by set screws to two projecting pieces of flat copper. The cover of the box is lined with mica and secured by a cotter pin. Should the fuse blow the metal cannot by any chance escape. There are 25 panels in all. Those on the saloon and gallery decks are set on the transoms of the doors of the side passages, those in the dining room under two of the sideboards, that in the engine room facing the engines and the others where they can best be placed. The two largest are those in the engine room and on the gallery deck, both of which control 24 circuits. Ten lamps on each circuit is the limit of the load of that circuit.

All the wiring appliances used were especially devised



QUARTER DECK, PRISCILLA.

by the General Electric Co. to meet insurance and government requirements. All junction boxes, switches and cut-out boxes used on the deck and other exposed places are absolutely water-tight. Where the wiring is exposed to moisture the wire is lead covered, and all wire larger than No. 6 Brown & Sharpe is stranded. Forty-five miles of wire in all are used on the vessel. The wire used is a special white core marine wire, having an insulation consisting of first a layer of pure para rubber, next a layer of rubber devoid of sulphur, which is finally covered with a layer of vulcanized rubber, containing 30 per cent of para rubber.

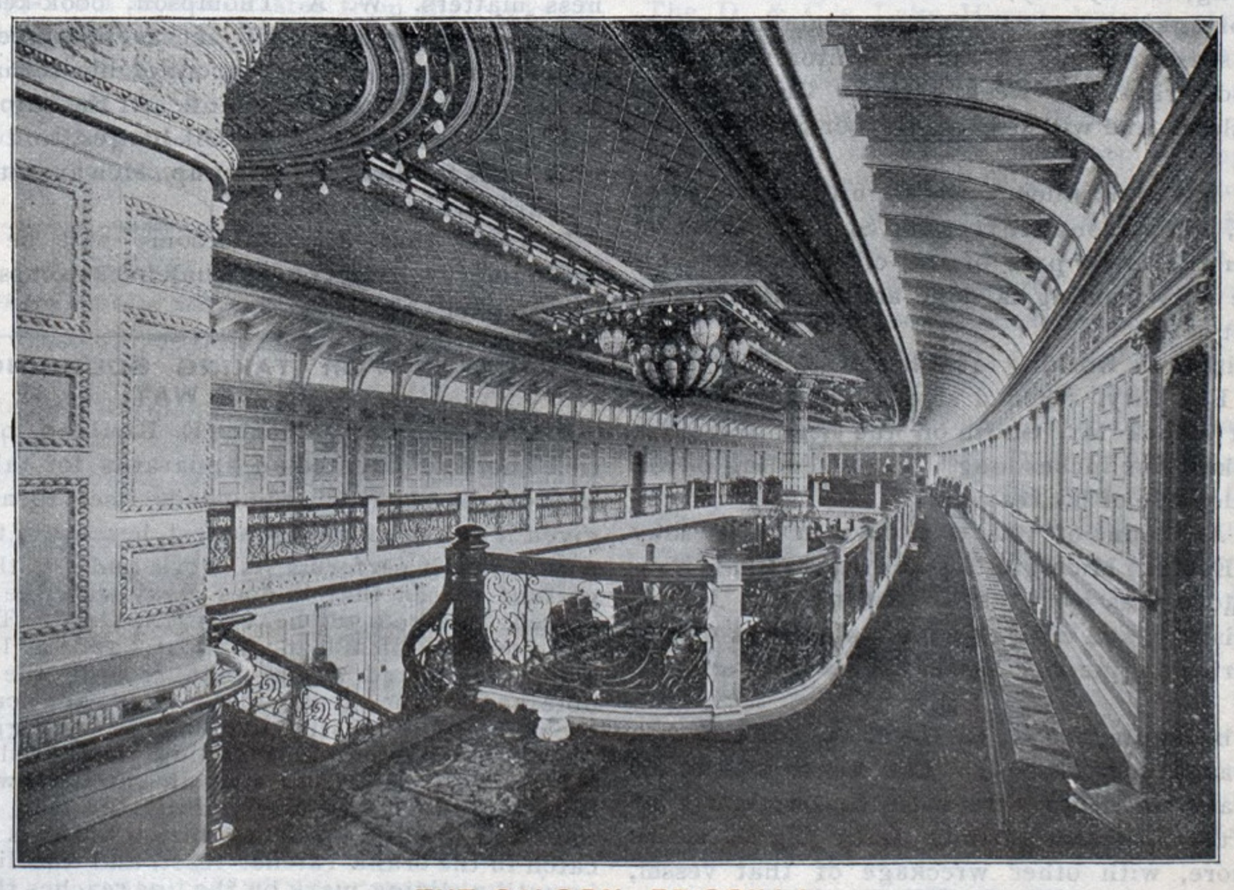
A series of charts showing the location of each circuit, each light and each appliance adorns the walls of the engine room.

Two combination ventilating sets, each consisting of a two-horse power motor directly connected to a No. 4 Sturtevant, are also installed on the Priscilla.

The purpose of this elaborately conceived and carefully installed marine electrical plant is the illumination of the Priscilla. Starting with the entrance hall or quarter deck we find the light proceeding from tulips set in the capitals of eight stanchions which support the roof. Each tulip is of opalescent glass set in a polished ornamental brass frame work, and contains 12 incandescent lamps.

Leading from the quarter-deck is a vestibule, lighted by ceiling fixtures, which gives access to the dining room. This is a spacious room running aft. Over each window is a box, with stained glass sides, holding ten 16-candle power lamps, and similar boxes are placed over the doors and mirrors at each end of the room. The ceiling is divided into square panels, each having a medallion in the center, and each alternate panel holding an electric pendent—an elliptical opalescent glass bowl held in a rope net of brass and containing two 16-candle-power lamps. Six rows of these extend from end to end of the room. On each side of the sideboard aft are two niches, in front of each of which hangs a basket pendant. The two private dining rooms are each lighted by five elliptical bowl fixtures, set in the panels immediately over the tables. The number of lights in the dining room is 350.

Passing from the dining room and recrossing the quarter deck, access is gained by a staircase to the main saloon, the ceiling of which is partly open, showing the roof of the dome. The lighting other than from the dome is effected by three light electroliers set between the stanchions and a series of two light brackets set between the stateroom doors. The mast passing up through the saloon carries an ornamental fixture at the height of gallery deck. In this the branches bend down and out from a central band and carry at their terminals frosted incandescent lamps set in opalescent globes.



THE SALOON, PRISCILLA.

At the forward end of the saloon is the grand staircase leading to the gallery deck. Facing this is a mantel of a highly ornate character, framing a mirror on each side of which is a four light bracket. The passages on each side of this are lighted by lamps fixed to pretty sprays, and each stateroom is provided with a one light bracket.

The principal feature of the lighting from the dome is a central fixture which takes the form of an inverted dome of brasswork, in which are framed panels of opalescent glass. This is dependent from the ceiling half way between the bulkhead of the staircase and the mast.

In this dome are 48 incandescent lamps. It occupies the centre of a quadrangular medallion, on each side of which is a much smaller inverted opalescent dome. Further aft is a smaller center dome with two lesser satellites, and still further aft another single dome.

Starting at the bulkhead is an inverted ridge of frosted lights set in the ceiling, the sockets being hidden in metal tulips. This ridge breaks into a quadrangle around the large central fixture, a circle round the mast, a narrow quadrangle around the second dome fixture and a circle around the third. In the forward saloon two 8 light electroliers are the main features.

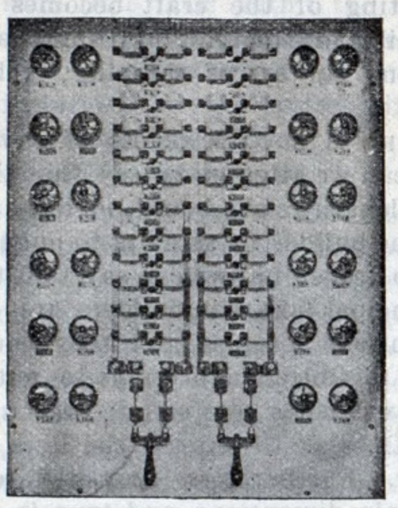
The gallery saloon benefits from the lighting just mentioned. In addition it has one 12 light electrolier in the forward saloon and a row of 12 incandescent lamps around the mast.

Forward of the gallery saloon are the cabins of the president, captain and principal officers, lighted by electroliers and brackets. The cabins of the other officers and the pilot house are on the dome deck, and are lighted by one light brackets. All the fixtures are in polished brass.

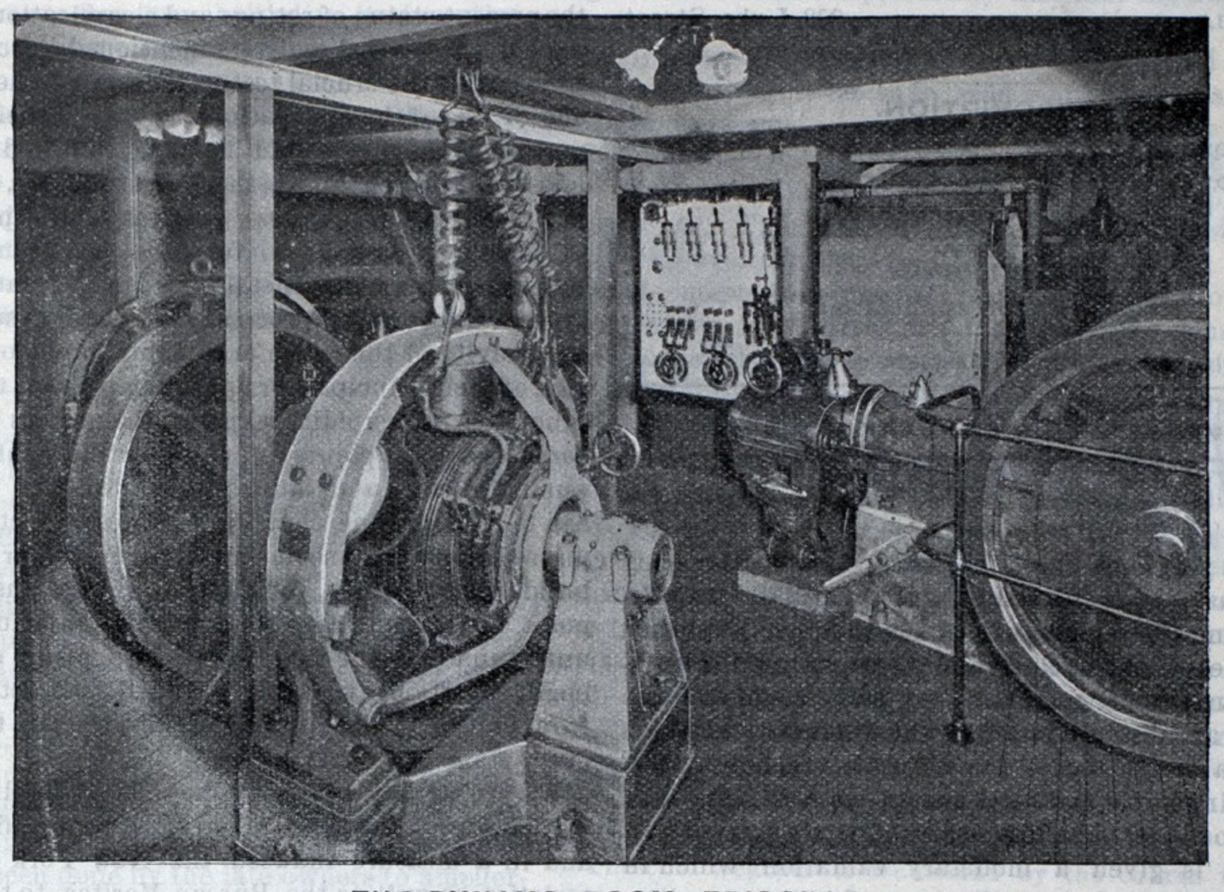
The lighting of the decks and all other parts of the vessel is effected by means of lanterns, some hung as pendants, others arranged horizontally, and all protected by cages. Wherever moisture can reach them they are protected by water-tight globes and sockets.

The lighting is distributed as follows: Dome deck, 9 circuits, 55 lights; gallery deck, 68 circuits, 596 lights; saloon deck, 44 circuits, 360 lights; main deck, 78 circuits, 748 lights; Lower deck, 12 circuits, 92 lights; hold, 18 circuits, 136 lights; total, 229 circuits, 1,987 lights.

The entire electrical equipment of the Priscilla was effected by the General Electric Co., whose work in this direction has obtained a very high reputation. This company also installed the plants on the sister ships of the Priscilla—the Puritan, Plymouth, Pilgrim and Providence. All the fixtures were designed and constructed by the General Fixture Co.



PANEL SWITCHBOARD.



THE DYNAMO ROOM, PRISCILLA.

A NEW EPOCH IN LAKE SHIPBUILDING.

Editorial in *Seaboard*, New York, January 31

The advent of steamships of six thousand tons' dead weight capacity, on the Great Lakes, is a matter in which we should all feel a deep satisfaction and pleasure, did there not lurk a danger which it is well enough to mention, lest it be too readily overlooked. The vessels now building that will be able, on 19 feet draft, to carry between 5,500 and 6,000 tons of cargo, when the 20-foot lake channels are completed, will come out about two years before their maximum capacity can be utilized. Meanwhile, these ships will be navigated with cargoes but two-thirds their capacity, or on 15½ feet draft. In severe storms, such as too frequently come up on the Great Lakes, the immense free-board that these vessels will carry will render them less easily manageable than those vessels which are adapted to the present channels. Although with water ballast tanks capable of increasing the ship's draft even to the maximum load line, experience has taught that these are availed of only as a last resort, and then their annoying features cause their being pumped empty, perhaps too soon. At any rate, the experience of the * * * in the summer of 1892, when, in driving into a great head sea she broke in two, should warn shipbuilders to take the utmost possible precautions to prevent the possibility of a similar occurrence.

Were the steamboat inspection service what it should be, in the possession of men of large and practical experience in the building of modern steel steamers, much of permanent good would follow their rigid observance of shipyard practices now in vogue. The classification and rating societies are depended upon altogether too much now by shipbuilders, or, rather, by shipowners, and it must be said that many existing lake vessels of late construction do no credit to either builders or those who classify them. This is emphasized in an editorial note of great significance, in the last issue of the esteemed MARINE RECORD, of Cleveland, and which we publish the entire:

"Strict rating and classification of new tonnage must, perforce, be the order of the day if lake builders and owners purpose holding lake vessels as the peers of any afloat. We do not know, of our own knowledge, that any departure from the published rules of the several classification societies doing business on the lakes have been permitted or are likely to be, but with steamers of 400 feet in length and 6,000 tons capacity there should be no laxity in the duties of regular inspection during construction and up to their final equipment. This system, if it may be so called, of surveys and classification ratings, which calls upon owners to expend from five to seventy-five thousand dollars after each season's work in the strengthening and necessary structural repairs to their large steel steamers, does not seem to be altogether in order, nor does it reflect any amount of honest luminosity on the value of a classification certificate, behind which either owners or builders can, or should be, in a position to take refuge."

It is too bad that our contemporary was so brief. There is so much of truth, and so much of hidden meaning, and fearful import, really, back of this brief statement, that the actual knowledge possessed by the writer, and which inspired his words, would be deeply interesting reading. We cannot refrain from adverting to the conspicuous omission of any reliance upon the United States steamboat inspection service to remedy the obvious, and really dangerous, shortcomings of the classification societies, not alone in the surveys of original construction, but in what our contemporary calls in apt phrase, "the strengthening and necessary structural repairs after each season's work," and which repairs, it should be remembered, it states vary, each season, from five to seventy-five thousand dollars!

What can be the practice of shipbuilders on the Great Lakes, when an alert newspaper, closely following their work, is able to calmly make such statements, it does not require one skilled in technique to understand. The builders, if they do understand what they are doing, are then morally guilty of something akin to murder when they construct vessels requiring what amounts almost to a rebuild each year, and if they do not understand what they are doing, and this is the view we prefer to take of it, then the United States Government should see to it, and at once, that they are taught, through rigorous inspections by steamboat inspectors of all vessels in course of construction. This is impossible under the present steamboat inspection service system of appointees, or of rules, but it should not be allowed to remain so.

We make these remarks in all seriousness, and assert that what our contemporary has stated is but an ebullition of an internal working of a mind convinced that the greatest danger lurks in the present methods of construction, classification and rating, and necessarily of inspection by government officials.

We suggest to the sub-committee of the commerce committee of the United States Senate, that if they desire information of a character to convince them of the utter inefficiency of the steamboat inspection service, they can probably receive it in large chunks, and with great frequency, in almost any of the Great Lake ports. Because we venture to say that the records of the steamboat inspectors fail to record, as the inspectors themselves fail to know, that modern steel steamships require from five to seventy-five thousand dollars spent on them after each season's work, in the way of "strengthening and necessary structural repairs."

And since we are at the beginning of an epoch in a larger class of lake craft, now is the time to institute correct practices and honest work in construction. This can best be done under the competent direction and supervision of unbiased, practical, capable officials of the United States.

THE DINING ROOM, PRISCILLA.

THE MARINE RECORD

ESTABLISHED 1878.

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WHAT ARE CLASSIFICATION SOCIETIES DOING ON THE LAKES?

But a few years ago the only vessel classification society doing business on the Lakes was the Inland Lloyd's, a strictly domestic register of wooden tonnage, published solely for the use of, "exclusive convenience and information of the insurance companies or their agents on the lakes." As an absolute proof of the Inland Lloyd's register being a simple record for office use among underwriters, their general and local agents, we may state that the entire tonnage, including each and every class of vessel was and is given a monetary valuation which in many cases hold good year after year despite casualties to the vessels and a consequent depreciation of values, the rate of freights prevailing, or other business fluctuations exercising a marked influence over the earning ability of the craft and an appreciable rise or fall in price of the floating property. In a word, cash valuations and not class or rating ruled the construction standard, merits of build and seaworthy qualities of all vessels. Such a record as the foregoing while a totally secondary matter in the staunch and perfect construction of a vessel, belongs essentially to the archives of an underwriter's office and as such, should be held like the secrets of a house—sacred, used only in a business sense and as a guide or auxiliary to the ventures of the active underwriter, for it is clearly demonstrable that inflated figures in cost of construction and equipment and therefore valuation ratings in the Inland Lloyd's by no means vouches for the faithful performance of the shipbuilders' art. In fact, structural ability may easily be suborned to enhance the equipment while the total cost would apparrently substantiate the claims to a good ship though a terribly poorly built one.

Taking the foregoing as a preamble, while understanding that the Inland Lloyd's classification is today about where it was a score of years ago, before metal tonnage was built on the lakes, we turn our attention to other or rather the only vessel classification societies since introduced and we find that within the past few years the American Shipmasters' Association of New York aspired to class lake tonnage and accordingly formulated rules for the construction of wood, iron, composite and steel ships. The efforts of this society seem to have fallen to the ground, for, whether through the lack of appointing and supporting proper agents, or the lack of attention to this branch of their business and otherwise antagonizing interests," "The Record of American and Foreign Shipping," is no longer heard of on the lakes nor are its rules of construction given any credence or weight at this time.

Contemporaneous with the American Shipmasters' Association came the "United States Standard Steamship Owners', Builders' and Underwriters' Association, Ltd." also with rules for the construction and classification of all types of lake tonnage and apparently supported by the owners, builders, underwriters and all other interests combined, but it is needless to state that a combination of antagonisms should and must result only in a Kilkenny cat fiasco where each chews the other up and such seems to be the result of the efforts of the U. S. S. S. O. B. & U. Asso. at this time, or it appears to be closely getting there Later, the well established though foreign society of Bureau Veritas attempted to come to the front and accept lake built tonnage for classification and rating in their register, in this instance, certain and radical modifications in the construction of lake tonnage has been permitted, but so far with no bad results; although but few large steel steamers have been classed in the Veritas and later developments may prove to builders and owners how far the modifications in building plans authorized by this society may inure to their advantage.

It has been necessary for us to go over the ground contained in the foregoing so as to place before our readers the present status of ratings and classification of lake tonnage in the several registers mentioned. But about this time comes the crucial test to determine the integrity of one or two of the associations, as well as their rules. Important tonnage we find is being hawked around the lakes to be taken up by the lowest bidder, irresponsible or otherwise, irregardless, perhaps, of the primary rules of marine architecture, for such we deem worthy of naming the immense metal structures recently put afloat. Agents desirous of procuring business and trusting to the suavity of their own arguments to win over the sanction of their principals or appealing perhaps to the latter's ignorance or cupidity, express themselves as willing to forego essential points of construction contained in the published rules and launch upon the lake vessels that can only in the due course of service reflect the utmost discredit on all connected with them, and primarily their builders and owners, for after all, from a business standpoint, the classification society rating inferior tonnage is, unfortunately, the last to feel the result of their own negligent if not wickedly premeditated acts, for which from first to last the shipowner has to "pay the piper" at every stage of the game.

We are strictly within the bounds of published reports in claiming that THE MARINE RECORD first agitated and in a measure induced the New York classification societies, as well as the Bureau Veritas, to turn their attention to classing lake vessels, and while strictly adhering to the letter of their rules, they were entitled to our best support which they duly received, for, let it be understood that there was no domestic classification society in a position to say, from a strictly technical standpoint, whether modern composite, iron or steel lake built vessels were worth classing or placing a dollar of risk on up to that time, nor is there now. With the advent of the several foreign, as opposed to the lake district association, our efforts were re-doubled to see that the thorough inspection and strict ratings and classification rules adopted and promulgated by the register societies desiring lake patronage were lived up to, and in pursuance of this object our best judgment and advice leads us to believe, nay to be morally certain, that the first state was fraught with less danger than the last or present situation, notwithstanding the recently introduced competition for the class and rating of lake tonnage.

The foregoing assertion is based chiefly on the amount of repair work to high-classed metal steamers now being carried on at the various lake shipyards. Reputable owners will bear us out when we express surprise at the necessity for strengthening comparatively new vessels, valued at a high figure, rated A1 and classed according to their original construction to withstand the wear and tear for over a couple of decades, yet, such repair work is now palpably in order, and such being the case, we purpose continuing our investigations until integrity takes the place of vacillation and safe rules for the building of all classes of lake tonnage are strictly adhered to despite any and all pressure which may be brought to bear from, on, or to, interested parties.

Our ideas of a ship classification society are leveled on a high plane, but not one whit higher than the ethics of the business demand. A slovenly built craft, rated high and classed for a long term, even if she was subject to an indifferent annual survey, will sooner or later carry scores of valuable lives into eternity at a time when nursing her may be out of the question. On the other hand, the reputation of the builders would soon be ruined, and, while the underwriters, having accepted a fraudulent rating, might cheerfully idemnify the owners for their actual loss, every cent of that loss would eventually come back out of the pocket of the owner and his confreres.

A society engaged in the classification and rating of any type of vessel built cannot ally itself with either sympathetic or conflicting interests without sooner or later coming to grief. Leniency shown by a classification society to builders in reducing the weights of structural material without lessening the guaranteed life of the vessel, works derogatory to the owners' and underwriters' interests. Issuing a high class and rating to a light built ship, while temporarily pleasing, perhaps, to both owners and builders, must have a baneful effect on the business of the insurance firms writing lines on such a hull, as she would be more or less in trouble at all times, and then the builder would soon begin to be permanently discriminated against by underwriters and owners. In a word, a classification society of repute stands for all purposes of material, ability and skill in the art of shipbuilding between an owner and builder, by granting only that rate of certificate to which the construction is strictly and justly entitled to, nor can the slightest deviation from the published rules, or any discrimination as between similar hulls be permitted. The ship being accepted by her owners, the classification society again stands, as long as she is classed, as the sponsor and voucher for her ability between the underwriters and her owners, shippers and consignees, and while every dollar which the vessel may cost for construction, classification and insurance comes directly out of the owners pocket, the universally accepted rules of construction and surveys made by a thoroughly competent and disinterested classification society, whose integrity, as well as that of every individual agent employed by them, is beyond the shadow of reproach, the various interests depending on a righteous rating of the craft becomes honestly safeguarded, while any dereliction from the strict line of duty in making surveys of shipping, "robs Peter to pay Paul.'

THE RECORD is not the keeper of any builder's conscience, nor can we attempt to say that the bait of high rating and a lengthy class would not have an influence in inducing some builder to attempt to put together a ramshackle cargo droger, but we can say, that the majority of and the principal lake shipbuilders are endowed with such conscientious scruples that they would not for all the wealth of a Golconda attempt to put afloat a craft which their experience pointed out must soon show such signs of distress as to imperil the lives of those who sailed in her. Furthermore, they well recognize that a vessel of certain dimensions and type is capable of carrying a stated amount of cargo on a certain draft and any departure from this rule is at the sacrifice of the necessary material used in obtaining structural efficiency, nor can any modernized ancient principles of construction compensate for an actual deficiency of material, skill and workmanship as determined by the best practice of universally known and reputable shipbuilders.

FROM THE LAKES TO THE HUDSON.

It is generally regarded as a matter of course that eventually there will be a means found, despite all of the ngineering difficulties as set forth at the present time, to unite the lakes with the coast through the agency of a deep water and big ship canal. Shipbuilders, vessel owners and cognate interests likely to be affected by such a waterway, throwing open as it would to international competition every avenue of business, are not losing any rest or expressing even a modicum of uneasiness at the nearness of what may be termed an approaching crisis in the business methods as at present pursued in handling lake commerce.

Notwithstanding the occasional deep water conferences and conventions, national and international, the incorporation of companies, acts of congress, or the authorization of a right of way by the Canadian Parliament to construct such a waterway, the present generation can well afford to ignore even the best advised and most energetic efforts put forth by the advocates of a deep water connection with the coast. Although the latest company to draw up articles of incorporation, and we note that the projects seldom go beyond the drawing-up feature, offer to construct a canal wherein the largest class of vessels on a twenty-feet draft may safely pass each other while going at full speed. The locks, of which there are not to be more than ten, are to be built to accommodate vessels of 500 feet in length, 60 feet beam, and 26 feet draft, all of which sounds remarkably modern and enticing, even seductive when handled with the jaw-tackle of an enthusiastic capitalist's henchman, otherwise yclept a company promoter, but losing considerable of its glamour when approached from an every-day, strictly business avenue.

It is well to record the promises made by the latest

competitors in the field of international canalizing. After congress empowers the company, incorporated with a capital of only ten million dollars. "to lay out, construct, maintain and operate a canal from some point at the head of tide water on the Hudson to Lake Champlain, thence from the head of Lake St. Francis to a point on the St. Lawrence above the rapids, known as the Long Sault, and from Lewiston on the Niagara to some point on the same river above the Niagara Falls, of such dimensions as to make navigable channels of at least twenty-feet between the terminal points mentioned. The United States is to have the right at any time to assume the possession of canals and works within its jurisdiction on giving the company one week's notice and paying the value of the same, to be fixed by three arbitrators. Furthermore, all tolls are to be charged equally to all persons and upon all vessels and goods. If the construction of the canal is not commenced and 10 per cent. of the capital stock is not expended within five years after the passage of the act, or, if the canals are not finished and put in operation within ten years, all powers granted by the statute shall cease."

To the foregoing terms are the company heralded as willing to abide and with the charter granted by Canada the passage of the measure is to be earnestly urged upon congress at the present session, though it seems needless to say that the urging process will prove abortive and another rest will perforce be taken by the canalizers to the coast. At the same time it is within the scope of commercial transportation and engineering progression to maintain that a deep waterway will connect the lakes to the coast at no distant day, but the project will not be completed within the present generation.

IT APPEARS to us that laws enacted by the Federal government and embodied in the Revised Statutes, ought not to be termed as simply "special rules duly made by local authority;" yet such has been the construction placed on the laws regulating the sailing and steering rules for lake and coast tonnage. Rules made by local authority are generally understood and accepted as harbor laws provided by city ordinances and differing at each port according to the circumstances, etc., of the location and the judgment of the councilmen, aldermen, harbormasters, port wardens or whatever local committee may have charge of the harbor work. The same commonly understood arrangement exists at other points besides harbors, as for instance, special local rules relating to the occupancy or mooring at wharves, docks and enclosed water areas under municipal jurisdiction, as opposed to federal. It is decidedly too narrow a view to take of important national legislation, when any one classes it as "special rules duly made by local authority" to guide national tonnage; but the fact remains that it has all along been accepted as the correct definition by quite a large following of the United States maritime interests. As we have pointed out, local rules are framed by a municipality having jurisdiction over a limited area, national or federal rules should be framed so that they would merit a proper observance when vessels were placed outside of the territory where local rules, by-laws, etc., had no further application or authority, and such a code is embodied in the new sailing and steering rules which the owners and shipmasters desire to see enforced on the lakes according to the bills which have already passed both houses of Congress and now only awaits the president's signature to become law.

DAILY newspaper writers, ever since the collision between the Elbe and Crathie took place, have consumed columns of space in pointing out which vessel was in fault, though with a marked sameness in their apparently logical conclusions, showing that the vessel reaching port was alone to blame. One great Northern Ohio daily newspaper tangled itself up by venting the following rot: "On both sides it is stated that when the lights of each were visible the vessels were coming nearly end on, and right here comes the crucial point of the case. Under the circumstances the rules of the road required both vessels to port their helms, which would have caused them to swerve away from each other. Had this been done by the Crathie, it is claimed, she would have passed under the Elbe's stern, or at any rate the two vessels would have struck broadside on, with probably no great damage. The testimony is that both vessels kept on their courses and the Crathie cut straight into the Elbe." Another statement gives the course of the Elbe as S. S. W. and the Crathie on her port side heading W. N. W. Should this latter situation be the correct one the Crathie ought to have kept out of the way, as she had the Elbe on her starboard side. It is of course ridiculous for any one to express an opinion relative to the action taken by either steamer, until evidence has been adduced and decided upon by the court of inquiry invariably held on these occasions where British tonnage is concerned. It is not a desirable feature in all cases, from an owner's or underwriter's standpoint, to hold these marine boards of inquiry whenever a serious casualty takes place, and in this country the departure has been balked in its inception when suggested as a means of preventing future wrecks and collisions through pointing out the errors and causes to be avoided as determined by the findings of the court or board. Notwithstanding such a narrow-minded view it would be of the greatest possible advantage to the fraternity at large if the United States adopted such a system of inquiry into losses, as by so doing seamen might be forewarned against casualties by pointing out in each instance how others had previously got into trouble through pursuing a certain course.

GENERAL and particular credit is due the late owners of the steamer Chicora, lost two weeks ago on the east shore of Lake Michigan, for their humane and unremitting efforts to render assistance to hoped-for survivors of the wreck. Everything that was possible, from the time the vessel was reported overdue up to the present, has been done by the principals of the firm of Graham & Morton, owners of the ill-fated craft, and a special expedition in charge of Capt. Henry Stines, brother of the late master of the Chicora, was fitted out to search for the wreck or any survivors, or even the bodies of any of the crew, that might have been found in the vicinity wherein the casualty was supposed to have taken place. Furthermore, much has been done by the late owners to ameliorate the condition and stave off the "wolf from the door," that had already commenced to hang around the purlieus of the homes of some of the members of the lost crew. Among the many acts of thoughtfulness and sympathy so widely distributed by the owners of the ship, is that of cancelling the mortgage held on the residence of the late captain's widow, an act at once gracious and, we had almost said, equitable, but certainly kindly sympathetic toward the widow in her great trouble over the loss of her estimable bread-winner.

THE mortality among men connected with the lake trade and whose duties were chiefly with the shore end of the business, has been greater during the past week than in any previous period of similar duration. The most notable deaths, recorded in our columns this week, are those of Mr. Thomas Quayle, aged 88 years; Mr. Alanson Gilmore, 89 years; Mr. Colin Graham, 90 years; Mr. John Gerlach, 74 years; Capt. Thomas Davidson, 67 years, and Mr. H. P. Card, 52 years. It will be seen that in at least four cases the allotted span of three score years and ten had been passed and in one instance the four score and ten mark had been reached.

A CORRESPONDENT, in a somewhat lengthy letter to THE RECORD this week, enters a general complaint against fast steaming in thick weather on the lakes and an unusual inattention to the meeting, passing and crossing signals. The communication also deals with the owner's letter of instruction to masters, especially where they are told to get their vessels around without loss of time, etc. As the new rules of the road now before the Senate will likely come into force on the lakes next season, the communication is not opportune and we therefore withhold it from our columns pending the passage of the new rules for lake navigation.

WHETHER we are to have a canal to the coast or even if the Chicago drainage canal is going to lower the level of the lakes seems to cut no figure with owners at this time, as contracts for two immense new steel schooners will have been closed this week. The Chicago Shipbuilding Co. are reported to have just closed a contract for a new steel schooner of 365 feet in length and 44 feet beam, this is an easy 6,000 ton craft on a fair draft of water. A similar contract at another shipyard will be closed today for a steel schooner fully equipped with canvas, and steam steerer, her dimensions will be 320 feet in length and 41 feet beam built for Lake Erie owners.

WE take pleasure in publishing in another column of this issue, an editorial on shipbuilding, taken from the columns of *Seaboard*, New York. Our contemporary places the onus of rating modern tonnage on the shoulders of the United States steamboat inspection service, a reasoning which we think is too far fetched, and one which will not obtain a footing in the United States for a few decades yet, though in this view we are, perhaps, lengthening the period beyond the time of its actual inauguration. We have previously held that the duties of the steamboat inspection service would be more appropriately termed if the word equipment was placed before the word inspector, so as to read equipment inspector and not as it now reads "inspector of hulls" for as is well known it is the actual equipment and not the hull that our local inspectors pay attention to. The keenest experts, experienced shipbuilders, naval officers, a la the Carnegie frauds, highly trained mercantile marine architects, not to mention chiefs of constructive departments, consulting and marine engineers as well as shipyard superintendents are all too slow at times to detect violations of the rules of construction and indifferent tests of metals, how therefore can the old shipmasters, and of such are the majority of the U. S. steamboat inspectors of hulls, who may never even have been afloat in an iron vessel detect signs of weakness, or a lax attention to the details of construction throughout the various or any portion of the hulls of large modern steel steamers. Our contemporary would aim at a feasible point in seeking to key up ship classification societies to the standard that they ought to maintain instead of advocating a contrariety to accepted customs the world over.

COAL AND ORE.

The cold weather is welcomed by the coarse freight men, although the winter package freight and passenger business on Lake Michigan is practically suspended until the weather moderates. The present vigorous weather, if continued, means a later opening of navigation in the spring, and a shorter season is usually supposed to mean slightly improved freights. The cold also causes an increased consumption of coal at the head of the lakes. Although the receipts of coal there were about the same last year as in 1893, the present shipments by rail from the docks are reported as two months ahead of what they were a year ago. There was about 1,200,000 tons in stock at the close of navigation, and about half this amount has been disposed of. This leaves 600,000 tons on dock now, as compared with more than 450,000 tons last spring at the opening of navigation. The shipments from the dock consists of a great many small orders, but even at this rate shipments are very lively. If the weather continues cold for another month, there will be no question that all the coal in sight up there will be in demand. It is certain that there will be no surplus of anthracite, and the soft coal is almost equally certain to be used up. This seems to promise a greater number of early coal cargoes, but the combinations which the coal men are forming, in order to sell their output at a better margin of profit, do not seem to promise the vessels much in the line of better rates.

The ore situation has not changed materially during the past week. While nothing further regarding the dealers' agreement has been published, there is every reason to believe that it has been brought to perfection at this time. Some small sales of ore now on dock have been made at $2.90, and furnace men do not seem disposed to resist the advance, even though the price of their own product is not improving. As to restriction of output, it does not seem that the Minnesota Iron Co. intends to reduce production, judging from the preparations being made for the transportation of ore.

M. E. B. A. NATIONAL OFFICERS.

At the annual convention of the Marine Engineers' Beneficial Association, held in Washington, last week, the following officers were elected: National president, Geo. Uhler, of Philadelphia; national vice president, J. J. Deasy, of San Francisco; national secretary, T. F. Dowd, Chicago, and national treasurer, J. J. A. Williams, of New Orleans. No business of importance was transacted at the meeting. The convention of the American Association of Masters and Pilots of Steam Vessels was continued yesterday.

OBITUARY.

ALANSON GILMORE.

Mr. Alanson Gilmore died at Lorain, Friday night, of old age, after many long months of helplessness and patient suffering. For months his body has been rapidly wasting away, although he retained his full mental vigor to the last, and arranged with the undertaker all the details of his funeral. When the end came he dropped into a quiet sleep, holding the hand of his son-in-law, Capt. Thomas Wilford, the well-known master of the steamer Samuel Mitchell.

Mr. Gilmore was nearly ninety years old, having been born April 12, 1805, at Chester, Mass. He was the sixth in a family of eight children, seven of whom were boys. His father pre-empted land two miles west of what is now Lorain, and brought his family out in 1812. Mr. Gilmore clearly remembered having heard the firing in the famous battle of Lake Erie. In 1827 he went to work in a shipyard, and assisted in building a small sloop. The following year he built the sloop Lorain, and in company with Capt. Washington Jones, who died in Cleveland recently, he built the brig Indiana. Later he built the Rocky Mountain, afterward used in constructing the Conneaut bridge, and the schooner C. F. Ellen, which was the first vessel built at what was then known as the Globeville dock. In 1863-4 he built the schooner John H. Prince and the scow Aunt Ruth. The last is the only one of all those named which is now afloat.

In 1858, Mr. Gilmore was married to Miss Emma Lynch, who died in 1863. In 1865, he married Mrs. Sarah Manton, who survives him. He was the father of five children, Simon A., Joel M., Byron A., and Mrs. Adelaide E. Gilmore and Mrs. Fanny M. Wilford, all but one of whom are still living.

The funeral services were held Monday in the Lorain Disciple Church, and the interment took place at North Amherst. Q. A. Gilmore, of Elyria; Q. A. Gilmore, of Cleveland; O. Gilmore, H. Gilmore, W. E. Gilmore, and C. F. Bartenfield, of Lorain, acted as pall bearers.

HENRY P. CARD.

The late Mr. H. P. Card, of Cleveland, who passed away on Friday last, was a gentleman held in high estimation among those with whom his business pursuits brought him into contact. Mr. Card, though generous to a marked degree, quiet, unobtrusive and liberal in his giving to those who were not so well blessed with this world's goods as himself, never let his good works be publicly known nor was his name often seen in the lists of patrons of public institutions, although his influence always tended in the right direction.

Mr. Card was born in Ohio something over fifty-two years ago, and removed to Cleveland with the other members of his father's family when a boy of fourteen or fifteen years. His father, Mr. J. F. Card, is still alive, as are also three of his sisters. Mr. Card was largely an owner of coal mining property and he was also heavily interested in vessel property, being part owner of the steamer Onoko, interested in all the boats of the Mutual Transportation Co., a stockholder in the Globe Iron Works Co., the Union National Bank, and the Savings and Trust Co. He was a man of companionable ways and genial disposition, and those who stood near him in the business as well as the social world will miss his fellowship. The funeral of Mr. Card took place on Monday afternoon, Rev. Dr. C. S. Bates, of St. Paul's Protestant Episcopal Church officiating.

CAPT. THOMAS DAVIDSON.

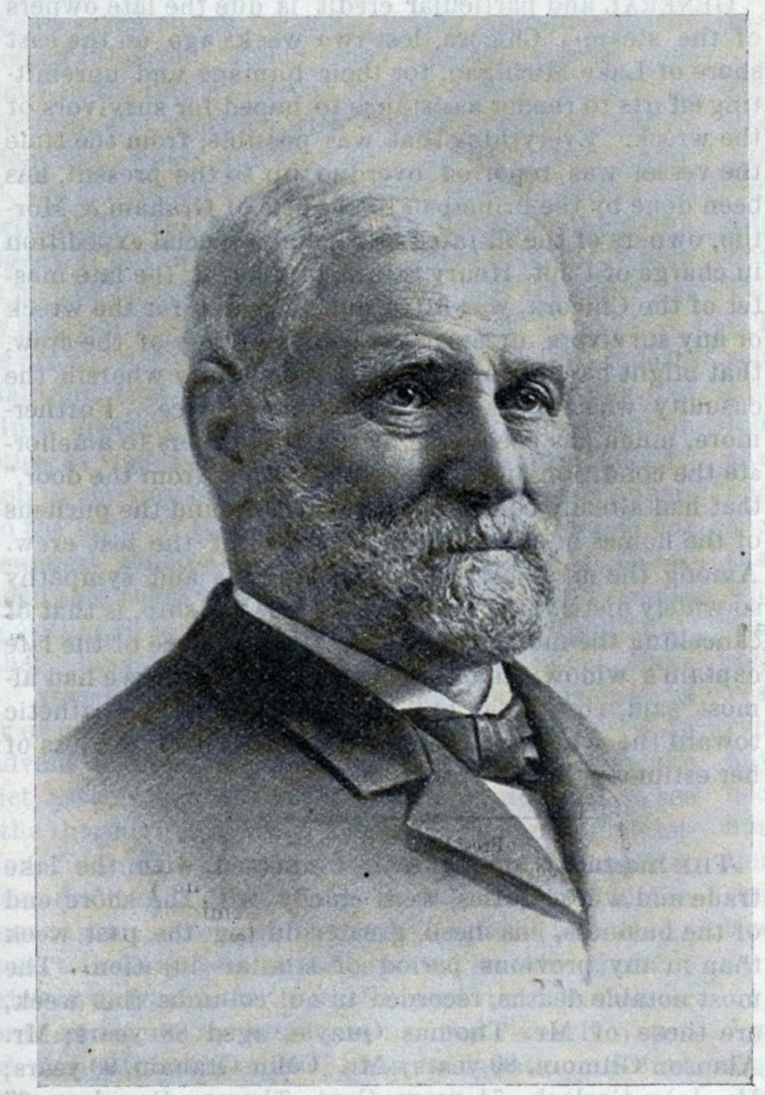
Many readers of THE RECORD will be pained to learn of the sudden death of Captain Thomas Davidson, at his home, No. 249 Twenty-fourth street, Milwaukee, on Saturday last. The direct cause of his death is said to have been appendicitis. He was to have been operated upon the night before his death, but grew so weak that it was postponed. The funeral occurred Tuesday. The deceased was 67 years old at the time of his death, and his wife, two sons and four daughters survive his loss. The sons are Joseph and Thomas, and the daughters are Mrs. Burt Merriam, Mrs. Louis R. Esau, and Misses Nellie and Mary Davidson.

Capt. Davidson was part owner of the fleet of the Wisconsin Steamship Co. consisting of the Thomas Davidson, Ferdinand Schlesinger, and George H. Dyer, all large lake steamers. He was born in Scotland, March 20, 1828, and learned the trade of a ship carpenter there. He crossed the ocean and located at Milwaukee in July, 1855. He secured work with J. M. Jones, and was later employed by B. B. Jones. In 1861 he formed a partnership with Lem Ellsworth, under the firm name of Ellsworth & Davidson, in the ship-building business. Mr. Ellsworth sold out his interest in 1868 to W. H. Wolf, and the firm of Wolf & Davidson existed until about four years ago, when Mr. Davidson retired, Mr. Wolf being succeded sometime later by the Milwaukee Dry Dock Co. in which both men were stock-holders.

Capt. Davidson was a prominent member of the Masonic fraternity, and was in the Scottish Rite Consistory, Ivanhoe Commandery, Knights Templar, and a member of Excelsior Lodge. He was also a member of the St. Andrew's Society.

MR. THOMAS QUAYLE.

A pioneer lake shipbuilder in the person of Mr. Thomas Quayle has been called hence since our last issue and although he had been practically an invalid for the past



THOMAS QUAYLE.

eight years, men engaged in the marine business over the extent of the Great Lakes from Duluth to Ogdensburg will be grieved to learn of his demise.

The late Mr. Thomas Quayle has, with good reason, been called the father of Cleveland shipbuilders, an appellation which was literally correct. He was born in the Isle of Man, May 19, 1811, and came with his parents to Cleveland in 1827. He finished his apprenticeship as shipbuilder in Cleveland and started in business in 1847, with James Cody as partner, the firm continuing three years. Soon afterward Mr. Quayle took in Luther Moses as partner and they had as many as seven boats on the stocks at one time. After two years Mr. Moses left the firm and John Martin took his place, and the boats built by Quayle & Martin have still a high reputation on the lakes. In one year they built thirteen vessels, among them the Dean Richmond, which was lost on Lake Erie in October, 1893. In 1874 Mr. Martin died and the firm was reorganized under the firm name of Thomas Quayle & Sons, George L. and Thomas E. Quayle being made partners. They built the steamers E. B. Hale, Sparta and Commodore, the latter being at that time the largest vessel on the lakes. In 1878 they built two boats for the Anchor Line and two, the Buffalo and Chicago, for the Western Transit Co. In 1882 Mr. Quayle retired from business and the firm was continued as Thomas Quayle's Sons, William E. entering the firm, and building some of the staunchest and largest wooden steamers now afloat on the lakes. This firm continued as long as the wooden shipbuilding industry continued to amount to anything, when the several partners turned their attention to other lines of business, Mr. George L. Quayle being now general manager of the Ship Owners' Dry Dock Co.

The immediate cause of the dissolution of the veteran shipbuilder was congestion of the lungs and liver. Up to a few days before his death Mr. Quayle was apparently as well as he had been at any time within the last few years, but after a more serious congestive chill than usual, his feeble constitution was unable to bear up against it. He leaves a widow and the following children to mourn his loss: Thomas Quayle, George L. Quayle, Mrs. Charles H. Gill, Mrs. L. H. Malone and Mrs. H. M. Barrett, all of whom live in Cleveland.

The deceased was married twice—his first wife being a Miss Eleanor Cannon, of the Isle of Man, to whom he was united in 1838. Eleven children were the result of this union. In September, 1860, Mrs. Quayle died and in 1867 he married Miss Mary Proudfoot, daughter of John Proudfoot, Esq., who survives him. At the time of his death all of the children, with the exception of Mrs. Gill and Mrs. Barrett, were in Florida. The funeral services were conducted on Tuesday by the Knights Templars Masonic fraternity, to which the deceased belonged for many years, he having attained the thirty-second degree in masonry.

COLIN GRAHAM.

Colin Graham, an ex-employe of the government lighthouse service, died in Detroit Jan. 30, at his home on 237 Seventeenth street, Detroit, aged 90 years. He was born in Scotland and followed the life of a sailor, on both salt and fresh water. He entered the lighthouse service in 1853, being appointed keeper of the light at Tawas Point. In 1857 he was transferred and given charge of the lights at Charity Island, where he remained until 1865, when he retired from the service. Eight children survive him—Mrs. Nelson L. Farrar, Mrs. E. MacKay, Mrs. D. Duncan and Messrs. Daniel, John, and Duncan Graham, all of Detroit; Mrs. A. Cameron, of Collinsville, Ont., and Mrs. E. Eldridge, of Chicago.

CAPT. JOHN GERLACH.

Capt. John Gerlach, of Cleveland, died suddenly Wednesday, aged seventy years. Capt. Gerlach came to this country from Darmstadt, Germany, and was early connected with the lake trade, although he never sailed very much. At the time of his death he owned the schooner Eliza Gerlach. He lost the schooner Gilmore about two seasons ago on Lake Michigan. He was also a large stockholder in the Minch Transit Co., which operates the steamer I. W. Nicholas. He leaves three sons—Rufus, bookkeeper for Peter Gerlach & Co.; William, master of the I. W. Nicholas; and Charles, who is in business on East River street—and one daughter, Mrs. Eliza Stahl, all of whom reside in Cleveland. The funeral services were held Sunday afternoon at the family home.

THE CHICORA'S CREW LIST.

The following is a complete and official list of the names of the crew of steamer Chicora, when she was lost on Lake Michigan, Jan. 21st.

Capt. Edward Stines, St. Joseph, Mich.; acting clerk, Jas. R. Clark, St. Joseph, Mich.; first mate, C. D. Simons, Benton Harbor, Mich.; second mate, Ben Stines, St. Joseph, Mich.; wheelsman, Joseph Marks, Benton Harbor, Mich.; chief engineer, Robert McClure, Detroit, Mich.; second engineer, Alfred Wirtz, Detroit, Mich.; firemen, John Werner and William Miller, both of Benton Harbor, Mich.; watchmen, Thos. Robertson, Baltimore, Md., and John Hodge, address unknown; oiler, Grant A. Downing, Lapeer, Mich.; coal passer, Alfred Downing, Lapeer, Mich.; cook, Nathan Lynch (colored), St. Joseph, Mich.; head waiter, M. W. Morgan, Benton Harbor, Mich.; pantryman, Jas. Malone, Chicago, Ill.; porter, Jesse Davis (colored), Benton Harbor, Mich.; deck hands, Archie Bentley, Ted Gearing, Dot Brundage and Jack Ryan, addresses unknown; passenger, Jos. Pearl, of the firm of Howard & Pearl, St. Joseph, Mich.

Of the above, the following had families: Capt. Stines, wife and son, the latter being his second mate and lost with him; James R. Clark, wife and daughter; C. D. Simons, wife and son; Robt. McClure, wife and five sons, all residents of Detroit; Nathan Lynch, family; Jesse Davis, wife and son. The passenger, Mr. Pearl, leaves a widow, but had no children.

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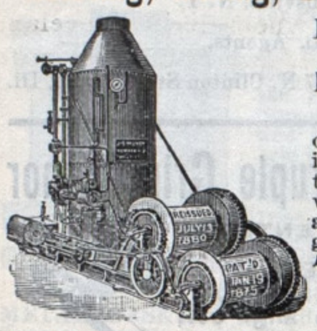

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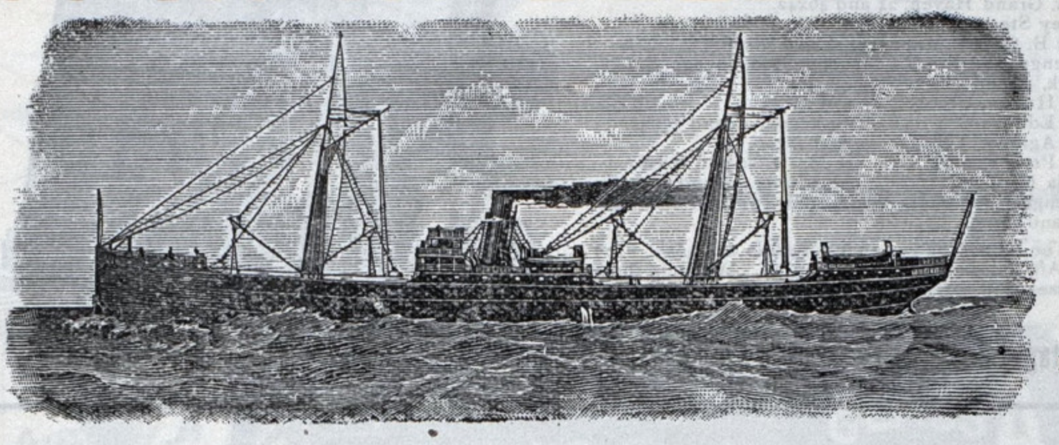

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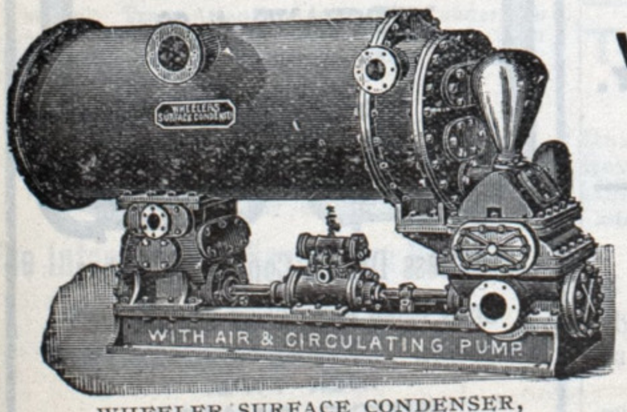

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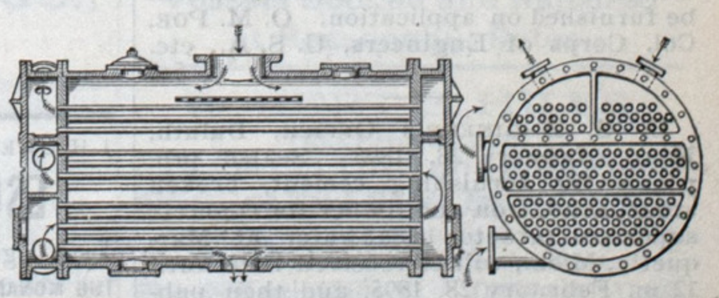

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PROPOSALS.

U. S. ENGINEER OFFICE, 34 West Congress St., Detroit, Mich., January 30, 1895. Sealed proposals for furnishing all labor, materials and appliances for A, Removing Portions of a Shoal at the Upper End of Hay Lake Channel and for B, Cleaning up Shoals near Nine Mile Point, Hay Lake Channel, will be received here until 2 p. m., March 1, 1895, and then publicly opened. Specifications, blank forms, and all available information will be furnished on application. O. M. POE, Col. Corps of Engineers, U. S. A., etc. 5-8

U. S. ENGINEER'S OFFICE, Duluth, Minn., January 28, 1895. Sealed proposals for furnishing cement, broken stone, sand, iron and timber for concrete superstructure to breakwater at Marquette, Mich., will be received here until 12 m. February 28, 1895, and then publicly opened. Further information furnished upon application. CLINTON B. SEARS, Maj. Engineers. 9-B

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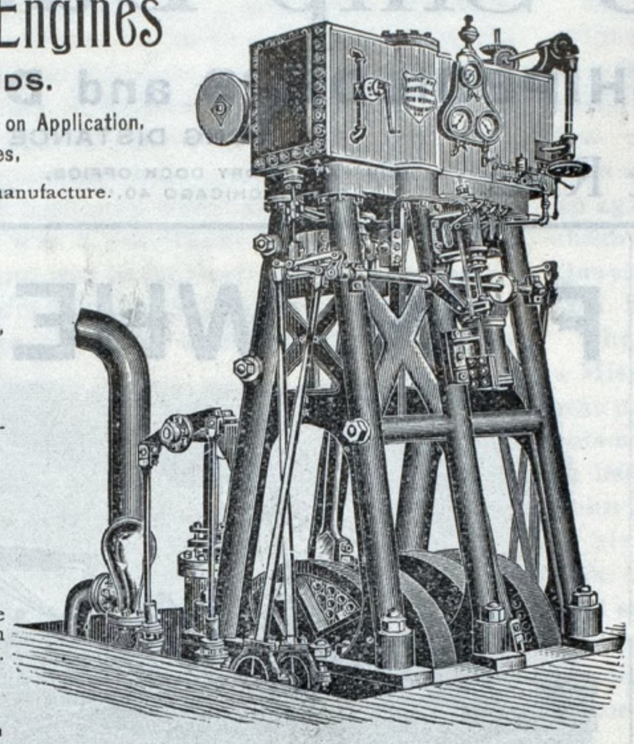

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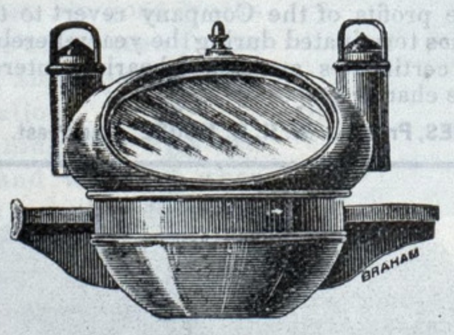

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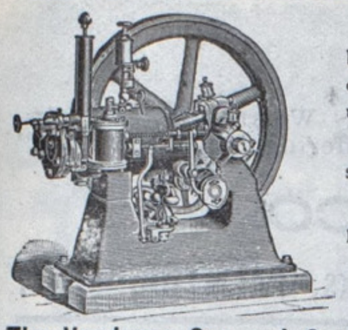

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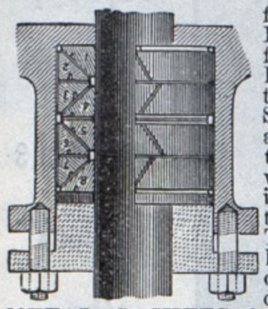

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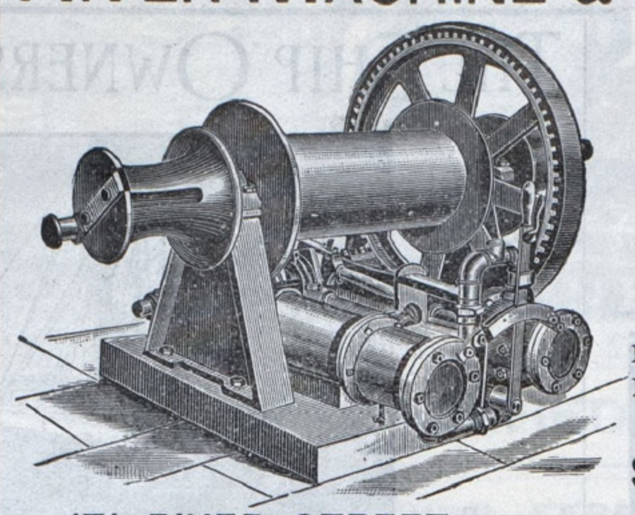

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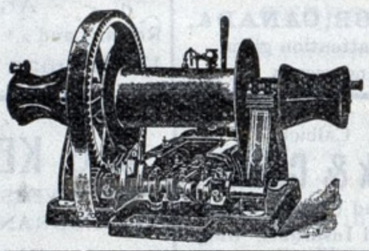

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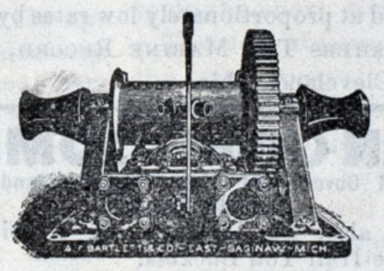

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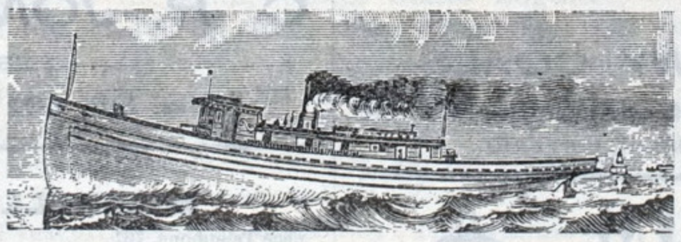

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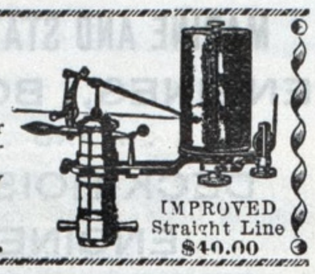

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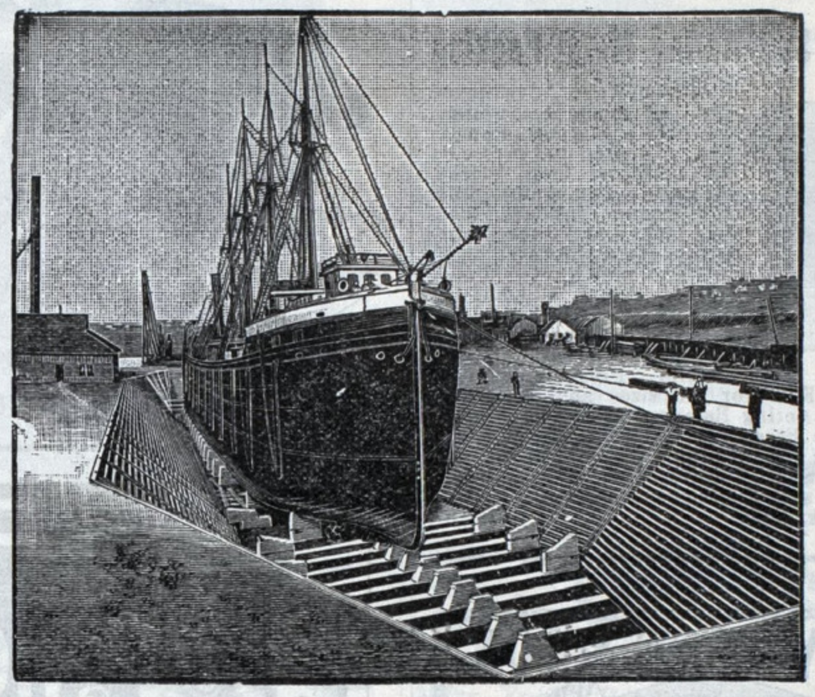

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